



EXAMINATION ANNOUNCEMENT

CALIFORNIA ENERGY COMMISSION

ENERGY COMMISSION SPECIALIST II (Technology Evaluation and Development)

OPEN

EXAMINATION PLAN – NO WRITTEN TEST IS REQUIRED

The entire examination will consist of a Supplemental Application weighted 100%. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained in the interview.

Applicants in the examination will be required to submit responses to questions contained in the Supplemental Questionnaire Application which are designed to identify job achievements in specific areas that demonstrate the ability to successfully perform at this level. **Applicants who do not submit complete information will be eliminated from the examination.**

FILING INSTRUCTIONS

CONTINUOUS TESTING-NO FINAL FILING DATE-Testing is considered continuous as dates can be set at any time. You may apply only once in any consecutive 12 month period. State Applications (STD 678) will be accepted on a continuous basis and examinations will be scheduled as needed. State Applications and/or resumes submitted via facsimile (FAX) machines, or electronically mailed (e-mail) will not be accepted.

FILE BY MAIL OR IN PERSON WITH:

California Energy Commission
Selection, Training & EEO Office (EC Spec II – (TED))
1516 Ninth Street, MS #52
Sacramento, CA 95814

Please submit one (1) State Application (STD 678) AND one (1) Supplemental Questionnaire Application for EACH classification level for which you are applying.

DO NOT SEND APPLICATIONS AND SUPPLEMENTAL APPLICATIONS TO THE STATE PERSONNEL BOARD

A mandatory Supplemental Questionnaire Application **must** be completed and submitted with a standard State Application (STD 678). To obtain the Supplemental Questionnaire Application, go to <http://jobs.spb.ca.gov/openxrd.cfm?exc=8ERD103> and for the State Application, go to <http://www.spb.ca.gov/jobs/stateapp.htm>. You can also obtain State Applications at the State Personnel Board, any Employment Development Department in California and the California Energy Commission. **State Applications received without the Supplemental Questionnaire Application or vice versa will not be accepted.** If you have any questions, please call the Selection Office at (916) 653-6532.

SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark question #2 of the "Application for Examination." You will be contacted to make specific arrangements.

ENERGY COMMISSION SPECIALIST II (TED)
BJ44 – 4185
8ERD1-03

www.energy.ca.gov
(916) 653-6532

Final Filing Date: Continuous testing

EQUAL EMPLOYMENT OPPORTUNITY TO ALL REGARDLESS OF RACE, COLOR, CREED, NATIONAL ORIGIN, ANCESTRY, SEX, MARITAL STATUS, DISABILITY, RELIGIOUS OR POLITICAL AFFILIATION, AGE OR SEXUAL ORIENTATION

SALARY RANGE\$5309 - \$6404

REQUIREMENT FOR
ADMITTANCE TO THE
EXAMINATION

It is your responsibility to make sure you meet the education and/or experience requirements stated below by the final filing date. Your signature on your application indicates you have read, understood and possess the basic qualifications required. **All applications/resumes must include: "to" and "from" dates (month/day/year); time base (full-time/part-time/number of hours per week/month); and civil service class titles where applicable. Applications/resumes received without this information will be rejected.**

MINIMUM
QUALIFICATIONS

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either" I, "or" II, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.

Either I

In the California state service, one year of experience performing technology evaluation and development duties in areas related to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Energy Commission Specialist I.

Or II

In the California state service, two years of experience performing technology evaluation and development duties in areas related to energy technologies, energy research, development and demonstration projects; advanced combustion technologies; transportation energy technologies and alternative fuels; efficiency improving energy technology and fuels; including duties such as analysis of economic, environmental and public health impacts in California at a level of responsibility equivalent to Associate Energy Specialist.

Or III

Experience: Five years of responsible technical experience in one or more of the areas described in Pattern I above, including four years of experience above the trainee level. A master's degree in a field related to one of the specialties may be substituted for one year of experience; while a doctoral degree may be substituted for two years of the required experience. Only one postgraduate degree may be counted towards experience. (Completion of dissertation research for a doctoral degree in a field appropriate to one of the Energy Commission specialties may be substituted for up to one year of the required experience.)

(Experience in the California state service applied toward this pattern must include at least one year performing the duties in a class with a level of responsibility equivalent to Energy Commission Specialist I.)

Education: The following education is required when non-California state service experience is used to qualify at any level. Equivalent to graduation from college. Additional experience may be substituted for the required education on a year-for-year basis.

THE POSITION

The Energy Commission Specialist II (Technology Evaluation and Development) position is identified by top Commission management as requiring the service of the most highly skilled practitioners who serve as prime resources and innovators in energy-related subjects which are the most sensitive and complex due to the rapid development in the subject area, extremely high legislative and media attention and multi-state impact. Incumbents provide expert guidance on highly complex and technical problems; and provide expert consultation services within their area of expertise. Incumbents may also serve as project leaders to address broad national issues such as global warming. Such major projects are characterized by their multidisciplinary scope and interstate impact.

Positions exist in Sacramento with the California Energy Commission.

SCOPE

Questions in the Supplemental Application are designed to test broad knowledge of the topic under consideration and candidates should be prepared to respond to a wide variety of issues, both technical and procedural.

KNOWLEDGE OF

1. A wide range of energy technologies and associated deployment and use issues;
 2. Energy supply and demand forecasts and analytic methodologies, energy policy issues affecting or resulting from energy technology development, and energy project management techniques;
 3. California Public Resource Code pertaining to energy resources conservation and development;
 4. Principles of physical sciences and engineering involved in energy resource development, conversion, distribution, and conservation;
 5. Principles of econometric and end-use energy demand forecasting;
 6. Energy sources and use within the California economy;
 7. Principles of engineering economics, financial analysis, and economic theory as it pertains to energy supply and demand;
 8. Energy technology costs and cost-accounting methods;
 9. Recent research and development projects related to the use of petroleum, natural gas, biomass and other synthetic fuels;
 10. Energy technology environmental impacts, including emissions, waste streams, volumes and characteristics;
 11. Energy technology public health impacts, air quality impacts and risk analysis;
 12. General provisions of social and economic implications of geothermal, solar, wind and other renewable energy development, technology and fuel demonstrations, resource planning and facility construction;
 13. Recent research and development projects in electrical, nuclear, geothermal, and other energy sources and their related fuels and technologies;
 14. Federal and State energy policy;
 15. Decision theory, probabilistic risk assessment, and techniques of comparative evaluation, and Federal, State and local government, utilities and private agencies in energy research and regulation;
 16. A variety of analytical and research techniques to resolve complex and policy sensitive issues and technical problems;
 17. Significant trends and issues reported in the energy literature;
 18. Theory and practice of utility planning and regulation, in general, and as implemented in California;
 19. Energy efficiency, conservation, planning, forecasting and research methods including problem definition, data acquisition, and analytical techniques;
 20. Other Federal, State and local energy related environmental goals, policies and organizations.
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ABILITY TO

1. Reason logically and creatively, evaluate and apply a variety of analytical and research methods for the purpose of systematic, critical, and thorough analysis of energy problems or prospective issues leading to formulation, testing, or revision of State and/or Federal energy policies;
 2. Utilize available computer systems for data base and/or computational applications;
 3. Manage contracts;
 4. Analyze energy data and present ideas and information effectively both orally and in writing;
 5. Communicate in both written and oral formats;
 6. Prepare and give testimony in planning and regulatory proceedings;
 7. Develop and use complex computer programs and analytic models;
 8. Develop and evaluate fuel alternatives;
 9. Gain and maintain the confidence and cooperation of those contacted during the course of work;
 10. Evaluate and quantify the effect of research, development and demonstration programs on energy systems;
 11. Analyze situations accurately and take effective actions, and act independently within the guidelines set forth by the Commission;
 12. Present ideas and analysis cogently and effectively;
 13. Consult with and advise other staff management, Commissioners, or others on the relative merits of specific energy technologies and the impact of various energy policies;
 14. Coordinate the complex technical work of others, act as a team or conference leader to analyze the more technical and complex situations accurately and take effective action;
 15. Establish and maintain project priorities;
 16. Testify as subject matter expert (geothermal solar, wind and other renewable energy development, technology and fuel demonstrations, recent research and development projects in electrical, nuclear, geothermal, and other energy sources and their related fuels and technologies) before the Commission and other groups;
 17. Serve as the Commission's top adviser in such areas;
 18. Effectively employ computer techniques for problems solving;
 19. Consult with and advise Office Managers, Division Administrators, Commissioners and other interested members of State energy community on a wide variety of energy forecasting, modeling and fuel-related issues and topics.
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**ELIGIBLE LIST
INFORMATION**

A departmental open eligible list will be established for the California Energy Commission. The list will be abolished 12 months after it is established unless the needs of the service and condition of the list warrant a change in this period.

**VETERANS
PREFERENCE POINTS**

WILL NOT BE GRANTED IN THIS EXAMINATION

CAREER CREDITS

DO NOT APPLY IN THIS EXAMINATION

ONLY INDIVIDUALS LAWFULLY AUTHORIZED TO WORK IN THE UNITED STATES WILL BE HIRED

GENERAL INFORMATION

For an examination without a written feature it is the candidate's responsibility to contact the Examination Unit at (916) 653-6532, three weeks after the final filing date if he/she has not received a progress notice. If a candidate's notice of oral interview or performance test fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request.

If you meet the requirements stated on the reverse, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

The California Energy Commission reserves the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) open eligible list. When there are two lists of the same kind, the older must be used first.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history, and fingerprinting may be required.

Veteran's Preference Points: Veteran's preference credit is granted only on open list resulting from entrance examinations. These credits are granted to all competitors who qualify for, and have requested these points and who are successful in all parts of the examination. (The examination announcement indicates if veteran's preference points will apply.) Requests for veteran's preference, together with proof of eligibility should be submitted to: State Personnel Board, 801 Capitol Mall, Sacramento, CA 95814, Attention Veteran's desk, MS-37. It is necessary to establish eligibility only once.

Career Credit: A competitor who passes an open, non-promotional civil service examination and who has permanent civil service status (or who has a mandatory right of reinstatement to a position with permanent civil service status) is eligible to receive three career credit points added to his/her earned score. Career credits are not given to persons who have permissive reinstatement privileges. The distinction between mandatory right of reinstatement and permissive reinstatement privilege is outlined in Government Code Sections 19140-19143. (The examination announcement indicates if career credit points will apply.) Veteran's points are not granted in such examinations.

DO NOT SEND APPLICATIONS TO THE STATE PERSONNEL BOARD

California Relay (Telephone) Service for the Deaf or Hearing Impaired
From TDD Phones: 1-800-735-2929 – From Voice Phones 1-800-735-2922

TDD is a Telecommunication Device for the Deaf and is reachable only from telephones equipped with a TDD device.

IT IS AN OBJECTIVE OF THE STATE OF CALIFORNIA TO ACHIEVE A DRUG-FREE WORK PLACE. ANY APPLICANT FOR STATE EMPLOYMENT WILL BE EXPECTED TO BEHAVE IN ACCORDANCE WITH THIS OBJECTIVE BECAUSE THE USE OF ILLEGAL DRUGS IS INCONSISTENT WITH THE LAW OF THE STATE, THE RULES GOVERNING CIVIL SERVICE, AND THE SPECIAL TRUST PLACED IN PUBLIC SERVANTS.



**CALIFORNIA ENERGY COMMISSION
SELECTION TRAINING AND EEO OFFICE
ENERGY COMMISSION SPECIALIST II and/or III
TECHNOLOGY EVALUATION AND DEVELOPMENT (TED)
SUPPLEMENTAL APPLICATION QUESTIONNAIRE**

The California Energy Commission's (CEC) Energy Commission Specialist II & III (TED) examinations are being given on an open basis. Both examinations will consist solely of this self-assessment Supplemental Application Questionnaire.

This questionnaire is your entire exam and is designed to elicit a range of specific information regarding each candidate's knowledge, abilities, and experience to effectively perform the duties relative to the classification(s). Candidates are responsible for reading all of the material provided prior to completing this questionnaire. Responses will be evaluated using predetermined rating criteria. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained. Please answer questions completely since incomplete responses and omitted information cannot be considered and/or assumed. *Resumes, letters of reference, and other materials will not be evaluated or considered* as responses to items in the Supplemental Application Questionnaire.

NOTE: Failure to meet the entrance requirements and/or to complete this questionnaire accurately will result in elimination from this examination.) *Candidates who fail to follow the instructions and/or who solicit input or assistance from others to complete this questionnaire will be eliminated from the examination.*

IT IS IMPORTANT THAT YOU RETAIN A COPY OF THIS SUPPLEMENTAL APPLICATION QUESTIONNAIRE FOR YOUR RECORDS. The California Energy Commission will NOT provide you a copy of your supplemental application questionnaire.

THIS AFFIRMATION MUST BE COMPLETED

I hereby certify and understand that the information provided by me (without assistance from others) on this Supplemental Application Questionnaire is true and complete to the best of my knowledge and contains no willful misrepresentation or falsifications. I understand this information may be verified. I also understand that if it is discovered that I have made any false representations, I will be removed from the examination process, removed from the list resulting from the examination, may not be allowed to compete in future examinations for State employment and I may be subject to prosecution for misdemeanor or felony offenses under California law. Additionally, State employees may have adverse action taken against them up to and including dismissal.

SIGNATURE: _____ **DATE:** _____

NAME (PRINT): _____

EXAMINATION TITLE: _____

The completed Supplemental Application Questionnaire **and** Standard State Application (STD. 678) can be personally hand delivered and/or mailed to:

**California Energy Commission
Selection, Training and EEO (ECS II & III (TED))
1516 9th Street, MS-52
Sacramento, CA 95814**

Facsimile (FAX) or electronically mailed (e-mail) applications will not be accepted

Failure to submit your Supplemental Application Questionnaire **with** your Standard State Application (STD. 678) will result in elimination from the examination.

Energy Commission Specialist II and/or III (TED)

Supplemental Application Questionnaire

Name: _____

Date: _____

PART I - EMPLOYMENT HISTORY

Instructions: Please describe your work experience as it relates to the Energy Commission Specialist II & III (TED) positions. Begin with your most recent position. The *EXPERIENCE CODE* will be used in Part II to identify where you worked. You may include additional pages if necessary.

EXPERIENCE CODE A

Employer Name: _____

Employer Location: City: _____ State: _____

Dates of Employment: From: _____ To: _____

Supervisor: _____ Telephone Number: _____

EXPERIENCE CODE B

Employer Name: _____

Employer Location: City: _____ State: _____

Dates of Employment: From: _____ To: _____

Supervisor: _____ Telephone Number: _____

EXPERIENCE CODE C

Employer Name: _____

Employer Location: City: _____ State: _____

Dates of Employment: From: _____ To: _____

Supervisor: _____ Telephone Number: _____

EXPERIENCE CODE D

Employer Name: _____

Employer Location: City: _____ State: _____

Dates of Employment: From: _____ To: _____

Supervisor: _____ Telephone Number: _____

Energy Commission Specialist II and/or III (TED)

Supplemental Application Questionnaire

PART II - WORK EXPERIENCE

The **Energy Commission Specialist II (TED)** positions are identified by top Commission management as requiring the service of the most highly skilled practitioners who serve as prime resources and innovators in energy-related subjects which are the most sensitive and complex due to the rapid development in the subject area, extremely high legislative and media attention and multi-state impact. Incumbents provide expert guidance on highly complex and technical problems; and provide expert consultation services within their area of expertise. Incumbents may also serve as project leaders to address broad national issues such as global warming. Such major projects are characterized by their multidisciplinary scope and interstate impact.

The **Energy Commission Specialist III (TED)** is the highest level of specialist assignment in the series intended to accommodate the broadest and most advanced levels of expertise required and to act as a technical advisor to the Commission on program and policy issues. Incumbents provide expert consultation in a broad range of technical and functional areas of policy development to top administration; make policy recommendations affecting program direction; and provide testimony to legislative bodies, outside agencies and Commission committees.

Instructions

Step 1: In the *Experience Code* column, use the codes from PART I of this questionnaire to indicate where you performed the activity and/or acquired the task or knowledge. You may list more than one code per item, if applicable.

Step 2: For each item listed on page 4, in rows "1" through "12," place an "X" in the column that most accurately represents the experience you have and the amount of time your experience represents.

SAMPLE

		CODE	EXPERIENCE				AMOUNT OF TIME			
		Experience Code(s)	I have had no education, training, or experience with this task.	I have had education or training on this task, but no application on the job.	I have performed this task on the job under normal supervision.	I have performed this task independently	I possess less than one (1) year of experience.	I possess one (1) to three (3) years of experience.	I possess four (4) to five (5) years of experience.	I possess more than five (5) years of experience.
1.	(Sample Item) Prepares reports for company.	A & C				X			X	

Energy Commission Specialist II and/or III (TED) Supplemental Application Questionnaire

PART II-WORK EXPERIENCE (CONTINUED)

QUESTION #1		PRINT NAME _____	CODE	EXPERIENCE				AMOUNT OF TIME			
INSTRUCTIONS: In the <i>Experience Code</i> column, use the codes from PART I of this form to indicate where you performed the activity or task. You may list more than one code per item, if applicable.			Experience Code(s) (FROM PART I)	I have had no education, training, or experience with this.	I have had education or training, but no application on the job.	I have performed this task on the job under normal supervision.	I have performed this task independently.	I possess less than one (1) year of experience.	I possess one (1) to three (3) years of experience.	I possess four (4) to five (5) years of experience.	I possess more than five (5) years of experience.
1.	Administer technical programs, projects, grants and/or contracts in energy-related subjects.										
2.	Analyze various energy issues, (e.g., environmental impacts, new technologies, alternative fuels, barriers to implementation, energy use patterns, opportunities to promote energy efficiencies and/or impacts of proposed policies).										
3.	Make recommendations to management and/or decision makers on policy directions based on technical analysis.										
4.	Research and critically review various issues by utilizing appropriate research methods (e.g., analyze energy technologies, perform survey research, efficiency analysis and/or economic studies).										
5.	Develop solicitations and prepare new contracts and/or grants (including work statements, justifications, and/or selection methods) for energy research or other technical services.										
6.	Manage and evaluate energy contracts and/or grants for quality, technical accuracy, timeliness and cost appropriateness of services and proper completion of work.										
7.	Write reports, white papers or research plans relating to topics (e.g., environmental impacts, new technologies, alternative fuels, barriers to implementation, energy use patterns, opportunities to promote energy efficiencies and/or impacts of proposed policies).										
8.	Read and comprehend a variety of technical materials in English, (e.g., scientific topics, contract/grant documents, reference guides, industry trends and issue manuals, regulatory documents, divisional or other agency policy and procedure manuals, professional standards and/or project plans) to provide for appropriate application of such information and documentation in the completion of work assignments.										
9.	Work as part of a group or team to complete work assignments and resolve problems.										
10.	Communicate effectively in response to inquiries regarding programmatic policies, procedures, practices and/or regulatory requirements pertaining to technology issues.										
11.	Make presentations to stakeholders regarding various topics (e.g., results of analysis, policies and procedures and/or scientific studies).										
12.	Make independent decisions with available information to determine and/or recommend appropriate resolution for problems, concerns, and/or priorities related to work assignments.										

Energy Commission Specialist II and/or III (TED)

Supplemental Application Questionnaire

PART III - PROJECT EXPERIENCE

List no more than three (3) of the largest energy related projects you have worked on. LIST EACH PROJECT SEPARATELY.

<p><u>QUESTION # 2</u></p> <p>Name: _____</p> <p><u>List of projects</u></p> <p>For each project you identify, fill in each box as follows:</p> <p>1) <u>Length of project</u>: Equivalent to full-time basis (in months)</p> <p>2) <u>Purpose of projects</u>-Check only ONE box</p> <p>3) <u>Your role(s) on project</u>-Identify the length of time in months. (Equivalent to full- time basis) Total should not exceed time in box 1.</p> <p>4) <u>Your project responsibilities</u>-Percent of time you worked on the project. (Percent of time should not equal more than 100%)</p> <p>5) <u>Project team</u>- Total number of people on the team</p>	(1)	(2)			(3)			(4)			(5)		
	Length of project ** Months	Purpose of Project Check only ONE box			Your Role(s) on Project Identify in months. (**Time should equal box 1**)			Your Project Responsibilities Should not equal more than 100%			Project Team Total number of people on team		
	Equivalent to full-time basis	Research, Development & Demonstration	Deployment	Policy Development	Principle Investigator/Researcher	Project Team Leader	Team Member	Final Products	Project Plans/Approaches	Project Milestones	One to two members	Three to ten members	Over ten members
1)													
2)													
3)													

Energy Commission Specialist II and/or III (TED)

Supplemental Application Questionnaire

PART IV – NARRATIVE QUESTIONS

You are being given two (2) questions on the following page for which you are to provide a narrative response.

Instructions

- Your response to each question **must be typed** in Arial, using 12 point font or larger.
- Your response to each question **must be limited to** two (2) pages per question (for a total of four (4) pages).
- Answer each question on a **separate page** and indicate the corresponding number for each response.
- Include the name of the examination, your name, and date on each page.

SAMPLE

Energy Commission Specialist II and/or III (TED)

Name:_____

Date:_____

Question #1.

Energy Commission Specialist I and/or III (TED)

Supplemental Application Questionnaire

PART IV – NARRATIVE QUESTIONS

Question # 3

The Governor recently announced a bold, visionary energy initiative that complements his climate change strategy to reduce greenhouse gas emissions. One element of the energy initiative calls on Californians to reduce energy consumption through conservation and improved energy efficiency, and to increase the use of renewable energy resources to reduce or eliminate fossil-based fuels.

You have been named a member of the Energy Initiative Team which is responsible for planning, organizing, and directing a program to achieve the Governor's energy initiative goals.

Describe the process and actions needed to achieve the Governor's energy initiative.

Question # 4

In light of increasing concern of CO₂ emissions from fossil fuel combustion, you have been asked to prepare an analysis to determine the economic feasibility of alternatives that are available to drastically reduce the use of fossil fuels.

- a) List alternatives you would consider in your analysis.**
- b) What analysis and steps would you take in preparing a complete report?**